

OIB - P-3 Orion 03/11/17 Science Report

Aircraft:

[P-3 Orion](#) ([See full schedule](#))

Date:

Saturday, March 11, 2017

Mission:

OIB

Mission Location:

Greenland

Mission Summary:

This is a new flight which was designed to sample sea ice as far west as we can reach with the P-3 across the International Date Line and north of Russia's Wrangel Island. This extends our sea ice coverage considerably to the west of our previous coverage extent. In addition to Level-1 Requirements SI1 and SI2, it addresses sea ice level projected requirement SIP2d by extending sea ice baseline observations to the Chukchi Sea north of the Bering Strait. Two lengthy Sentinel-3A orbits were flown during the flight, though exact coincidence was not achieved due to the timing of the satellite overpass. The overpass timings were 0632Z on March 11 and 0746Z on March 12. A short snow survey near the Fairbanks Airport was also overflown to deduce the ability of the IceBridge instrument suite to monitor snow on land.

This was an easy decision to launch as weather for the survey line was forecast to be mostly clear. Indeed this was largely the case with only a few patches of clouds present along the flight line. When clouds were encountered we descended to 1000 feet to range underneath them. This was a successful mission overall with nearly 100% data coverage.

Data volumes

ATM: T5: 22 Gb T6: 114 Gb

FLIR: 13.5 Gb

Cambot: 30 Gb

KT19: 10 Mb

DMS: 87.9 Gb

Snow/Ku radar: 1.02 Tb

MCoRDS: Did not run

Accumulation radar: Did not run

data on: 1945

data off: 0056

Submitted by:

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File:

 [chuckchi_west.pdf](#)

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